

12½" Portable Planer

(Model TP400LS)



PART NO. 906124 - 05-31-02
Copyright © 2002 Delta Machinery



To learn more about DELTA MACHINERY
visit our website at: www.deltamachinery.com.

For Parts, Service, Warranty or other Assistance,

please call 1-800-223-7278 (In Canada call 1-800-463-3582).

ESPAÑOL: PÁGINA 19

GENERAL SAFETY RULES

Woodworking can be dangerous if safe and proper operating procedures are not followed. As with all machinery, there are certain hazards involved with the operation of the product. Using the machine with respect and caution will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may result. Safety equipment such as guards, push sticks, hold-downs, featherboards, goggles, dust masks and hearing protection can reduce your potential for injury. But even the best guard won't make up for poor judgment, carelessness or inattention. Always use common sense and exercise caution in the workshop. If a procedure feels dangerous, don't try it. Figure out an alternative procedure that feels safer. **REMEMBER:** Your personal safety is your responsibility.

This machine was designed for certain applications only. Delta Machinery strongly recommends that this machine not be modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, **DO NOT** use the machine until you have first contacted Delta to determine if it can or should be performed on the product.

Technical Service Manager

Delta Machinery

4825 Highway 45 North

Jackson, TN 38305

(IN CANADA: 505 SOUTHGATE DRIVE, GUELPH, ONTARIO N1H 6M7)



WARNING: FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS PERSONAL INJURY

1. **FOR YOUR OWN SAFETY, READ INSTRUCTION MANUAL BEFORE OPERATING THE TOOL.** Learn the tool's application and limitations as well as the specific hazards peculiar to it.

2. **KEEP GUARDS IN PLACE** and in working order.

3. **ALWAYS WEAR EYE PROTECTION.** Wear safety glasses. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses. Also use face or dust mask if cutting operation is dusty. These safety glasses must conform to ANSI Z87.1 requirements. **NOTE:** Approved glasses have Z87 printed or stamped on them.

4. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it "on".

5. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.

6. **DON'T USE IN DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well-lighted.

7. **KEEP CHILDREN AND VISITORS AWAY.** All children and visitors should be kept a safe distance from work area.

8. **MAKE WORKSHOP CHILDPROOF** – with padlocks, master switches, or by removing starter keys.

9. **DON'T FORCE TOOL.** It will do the job better and be safer at the rate for which it was designed.

10. **USE RIGHT TOOL.** Don't force tool or attachment to do a job for which it was not designed.

11. **WEAR PROPER APPAREL.** No loose clothing, gloves, neckties, rings, bracelets, or other jewelry to get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.

12. **SECURE WORK.** Use clamps or a vise to hold work when practical. It's safer than using your hand and frees both hands to operate tool.

13. **DON'T OVERREACH.** Keep proper footing and balance at all times.

14. **MAINTAIN TOOLS IN TOP CONDITION.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

15. **DISCONNECT TOOLS** before servicing and when changing accessories such as blades, bits, cutters, etc.

16. **USE RECOMMENDED ACCESSORIES.** The use of accessories and attachments not recommended by Delta may cause hazards or risk of injury to persons.

17. **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure switch is in "OFF" position before plugging in power cord. In the event of a power failure, move switch to the "OFF" position.

18. **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.

19. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function – check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.

20. **DIRECTION OF FEED.** Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.

21. **NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop.

22. **STAY ALERT, WATCH WHAT YOU ARE DOING, AND USE COMMON SENSE WHEN OPERATING A POWER TOOL. DO NOT USE TOOL WHILE TIRED OR UNDER THE INFLUENCE OF DRUGS, ALCOHOL, OR MEDICATION.** A moment of inattention while operating power tools may result in serious personal injury.

23. **MAKE SURE TOOL IS DISCONNECTED FROM POWER SUPPLY** while motor is being mounted, connected or reconnected.

24. **THE DUST GENERATED** by certain woods and wood products can be injurious to your health. Always operate machinery in well ventilated areas and provide for proper dust removal. Use wood dust collection systems whenever possible.

25.  **WARNING: SOME DUST CREATED BY POWER SANDING, SAWING, GRINDING, DRILLING, AND OTHER CONSTRUCTION ACTIVITIES** contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
 - crystalline silica from bricks and cement and other masonry products, and
 - arsenic and chromium from chemically-treated lumber.
- Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

SAVE THESE INSTRUCTIONS.

Refer to them often and use them to instruct others.

ADDITIONAL SAFETY RULES FOR PLANERS



WARNING: FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS PERSONAL INJURY

1. **DO NOT OPERATE THIS MACHINE** until it is **assembled** and **installed** according to the instructions.
2. **OBTAIN ADVICE FROM YOUR SUPERVISOR, instructor, or another qualified person** if you are not familiar with the operation of this machine.
3. **FOLLOW ALL WIRING CODES** and recommended electrical connections.
4. **MAKE** all adjustments with the power off.
5. **DISCONNECT** machine from power source when making repairs.
6. **NEVER** turn the planer “ON” before clearing the table of all objects (tools, scraps of wood, etc.).
7. **KEEP** knives sharp and free of all rust and pitch.
8. **NEVER** perform any planing operation with guard removed.
9. **KEEP** fingers and hands away from cutting area.
10. **NEVER** reach under the cutterhead while the machine is running.
11. **KEEP** fingers and hands away from chip exhaust opening. The cutterhead rotates at extremely high speeds.
12. **NEVER** feed the work into the outfeed end of machine.
13. **ADEQUATELY** support the workpiece at all times.
14. **WHEN** planing extra long workpieces, **MAKE SURE** the material is supported at the infeed and outfeed end at table height.
15. **NEVER** start the machine with the workpiece in contact with the cutterhead.
16. **MAKE SURE** the workpiece is free from nails and other foreign objects which could cause injury or damage to the blades.
17. **MAKE SURE** the blades are properly secured in the cutterhead, as explained in the instruction manual, before turning on power.
18. **ALWAYS** allow the cutterhead to reach full speed before using.
19. **IF DURING OPERATION** there is any tendency for the tool to tip over, slide or walk on the supporting surface, **MAKE SURE TOOL IS SECURED TO THE SUPPORTING SURFACE.**
20. **DO NOT** perform planing operations on material shorter than 10 inches, narrower than 3/4 inches, wider than 12 inches, or thinner than 3/16 inches.
21. **BEFORE LEAVING** the machine, make sure the work area is clean.
22. **TURN THE MACHINE “OFF” AND DISCONNECT THE MACHINE** from the power source before installing or removing accessories, before adjusting or changing set-ups, or when making repairs.
23. **TURN THE MACHINE “OFF”**, disconnect the machine from the power source, and clean the table/work area before leaving the machine. **LOCK THE SWITCH IN THE “OFF” POSITION** to prevent unauthorized use.
24. **ADDITIONAL INFORMATION** regarding the safe and proper operation of this tool is available from the Power Tool Institute, 1300 Summer Avenue, Cleveland, OH 44115-2851. Information is also available from the National Safety Council, 1121 Spring Lake Drive, Itasca, IL 60143-3201. Please refer to the American National Standards Institute ANSI 01.1 Safety Requirements for Woodworking Machines and the U.S. Department of Labor OSHA 1910.213 Regulations.

**SAVE THESE INSTRUCTIONS.
Refer to them often
and use them to instruct others.**

POWER CONNECTIONS

A separate electrical circuit should be used for your machines. This circuit should not be less than #12 wire and should be protected with a 20 Amp time lag fuse. If an extension cord is used, use only 3-wire extension cords which have 3-prong grounding type plugs and matching receptacle which will accept the machine's plug. Before connecting the motor to the power line, make sure the switch is in the "OFF" position and be sure that the electric current is of the same characteristics as indicated on the machine. All line connections should make good contact. Running on low voltage will damage the motor.

 **WARNING: DO NOT EXPOSE THE MACHINE TO RAIN OR OPERATE THE MACHINE IN DAMP LOCATIONS.**

MOTOR SPECIFICATIONS

Your machine is wired for 120 volt, 60 HZ alternating current. Before connecting the machine to the power source, make sure the switch is in the "OFF" position.

GROUNDING INSTRUCTIONS

 **WARNING: THIS MACHINE MUST BE GROUNDED WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRIC SHOCK.**

1. All grounded, cord-connected machines:

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This machine is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided - if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the machine is properly grounded.

Use only 3-wire extension cords that have 3-prong grounding type plugs and matching 3-conductor receptacles that accept the machine's plug, as shown in Fig. A.

Repair or replace damaged or worn cord immediately.

2. Grounded, cord-connected machines intended for use on a supply circuit having a nominal rating less than 150 volts:

If the machine is intended for use on a circuit that has an outlet that looks like the one illustrated in Fig. A, the machine will have a grounding plug that looks like the plug illustrated in Fig. A. A temporary adapter, which looks like the adapter illustrated in Fig. B, may be used to connect this plug to a matching 2-conductor receptacle as shown in Fig. B if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green-colored rigid ear, lug, and the like, extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box. Whenever the adapter is used, it must be held in place with a metal screw.

NOTE: In Canada, the use of a temporary adapter is not permitted by the Canadian Electric Code.

 **WARNING: IN ALL CASES, MAKE CERTAIN THE RECEPTACLE IN QUESTION IS PROPERLY GROUNDED. IF YOU ARE NOT SURE HAVE A QUALIFIED ELECTRICIAN CHECK THE RECEPTACLE.**

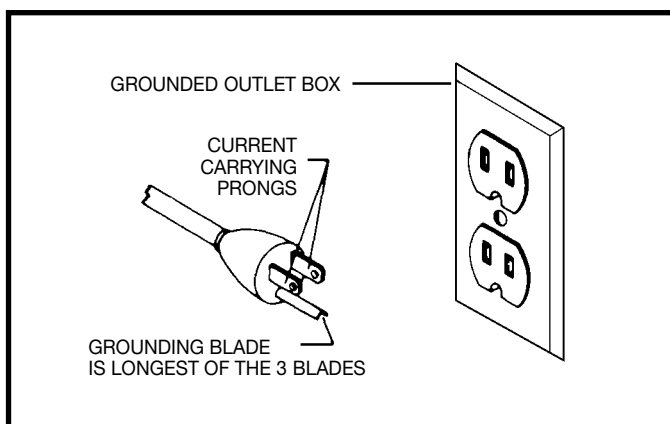


Fig. A

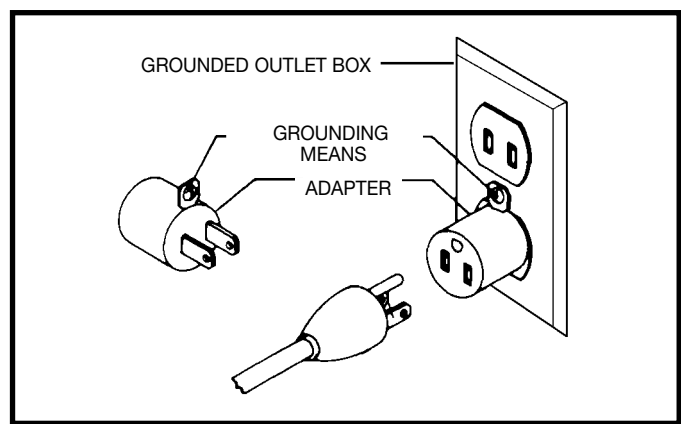


Fig. B

EXTENSION CORDS

Use proper extension cords. Make sure your extension cord is in good condition and is a 3-wire extension cord which has a 3-prong grounding type plug and matching receptacle which will accept the machine's plug. When using an extension cord, be sure to use one heavy enough to carry the current of the machine. An undersized cord will cause a drop in line voltage, resulting in loss of power and overheating. Fig. D, shows the correct gauge to use depending on the cord length. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

MINIMUM GAUGE EXTENSION CORD			
RECOMMENDED SIZES FOR USE WITH STATIONARY ELECTRIC MACHINES			
Ampere Rating	Volts	Total Length of Cord in Feet	Gauge of Extension Cord
0-6	120	up to 25	18 AWG
0-6	120	25-50	16 AWG
0-6	120	50-100	16 AWG
0-6	120	100-150	14 AWG
6-10	120	up to 25	18 AWG
6-10	120	25-50	16 AWG
6-10	120	50-100	14 AWG
6-10	120	100-150	12 AWG
10-12	120	up to 25	16 AWG
10-12	120	25-50	16 AWG
10-12	120	50-100	14 AWG
10-12	120	100-150	12 AWG
12-16	120	up to 25	14 AWG
12-16	120	25-50	12 AWG
12-16	120	GREATER THAN 50 FEET NOT RECOMMENDED	

Fig. D

OPERATING INSTRUCTIONS

FOREWORD

Delta ShopMaster Model TP400LS is a 12½" (317mm) Portable Planer. It has the following cutting capacity; 12½" (317mm) width, 6" (152mm) thickness and 3/32" (3mm) maximum depth of cut. Features include; basic machine with powerful 15 amp, 120 volt motor, dust chute, two-knife cutterhead with double-edged reversible knives, knife-installation tool, stand, and wrench.

UNPACKING AND CLEANING

Carefully unpack the machine and all loose items from the shipping container. Peel protective film from the table surface. Figures 1 and 2 illustrate the planer and all loose items supplied with your machine. Refer to the section of this manual entitled "**REPLACING KNIVES**" and remove the cutterhead guard. Remove the protective coating from the cutterhead. This coating may be removed with a soft cloth moistened with kerosene (do not use acetone, gasoline or lacquer thinner for this purpose.) **CAUTION: CARE MUST BE TAKEN WHEN CLEANING THE CUTTERHEAD, THE KNIVES IN THE CUTTERHEAD ARE VERY SHARP.** After cleaning cutterhead, replace the cutterhead guard.

NOTICE: THE MANUAL COVER PHOTO ILLUSTRATES THE CURRENT PRODUCTION MODEL. ALL OTHER ILLUSTRATIONS ARE REPRESENTATIVE ONLY AND MAY NOT DEPICT THE ACTUAL COLOR, LABELING OR ACCESSORIES AND MAY BE INTENDED TO ILLUSTRATE TECHNIQUE ONLY.

PLANER PARTS

1 - 12½" Portable Planer

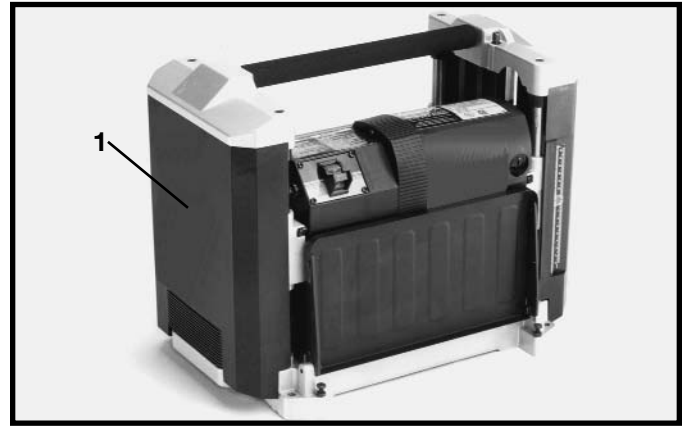


Fig. 1

2 - Cutterhead raising and lowering handle

3 - M5x.8x20mm hex socket head screw

4 - Cutterhead lock handle

5 - M6x20mm special hex socket head screw

6 - Wrench and handle assembly

7 - Knife transfer tool

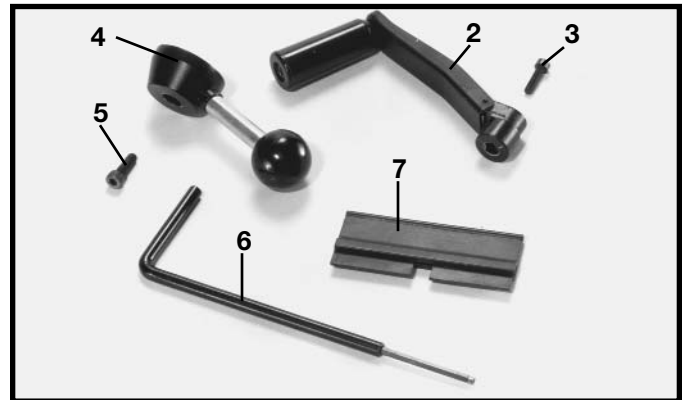


Fig. 2

ASSEMBLY

⚠ WARNING: FOR YOUR OWN SAFETY, DO NOT CONNECT THE MACHINE TO THE POWER SOURCE UNTIL THE MACHINE IS COMPLETELY ASSEMBLED AND YOU READ AND UNDERSTAND THE ENTIRE INSTRUCTION MANUAL.

STAND

A - Top Brace 17-7/8" (4)

B - Bottom brace 22-1/4" (4)

C - Leg (4)

D - Rubber feet (4)

E - Carriage bolt M8x1.25x16mm (32)

F - Flange nut M8x1.25 (36)

* - Hex head flange screw M8x1.25x35mm (4) (For fastening planer to stand) * not shown

1. Align the holes in the bottom braces (B) Fig. 3 with the holes in the legs (C), insert a carriage bolt (E) through the leg and the bottom brace, and thread the flange nut (F) onto the carriage bolt. Repeat this process for the remaining holes in the bottom braces and table legs. Do not completely tighten hardware at this time.

2. Assemble the top braces (A) Fig. 3 to the legs (C) in the same manner as step 1.

3. Insert the rubber feet (D) Fig. 3 onto the end of the legs (C) and tighten all hardware at this time.

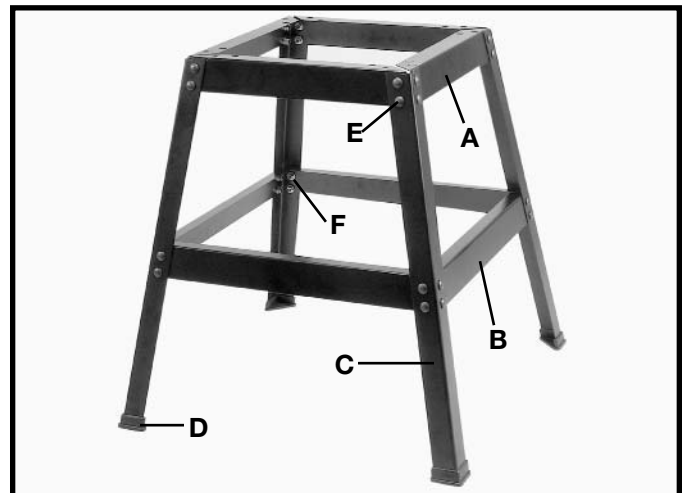


Fig. 3

LOWERING EXTENSION TABLES

The infeed and outfeed table extensions (A) Fig. 4, are shipped attached to the machine in the “UP” position. Rotate both table extensions to the down position as shown. The top surface of the table extensions should be level with the planer table. To check and adjust if necessary, refer to the section of this manual entitled “**LEVELING TABLE EXTENSIONS.**”



Fig. 4

CUTTERHEAD LOCK HANDLE

1. Assemble the cutterhead lock handle (A) Fig. 5, to shaft (B).

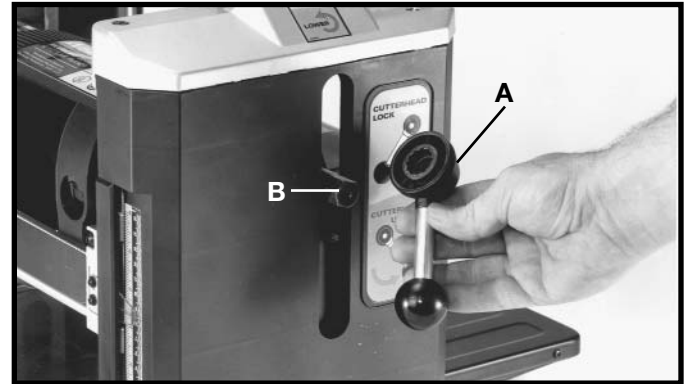


Fig. 5

2. Fasten cutterhead lock handle (A) Fig. 6, to the shaft using the M6x20mm special hex socket head screw (C), with wrench supplied.

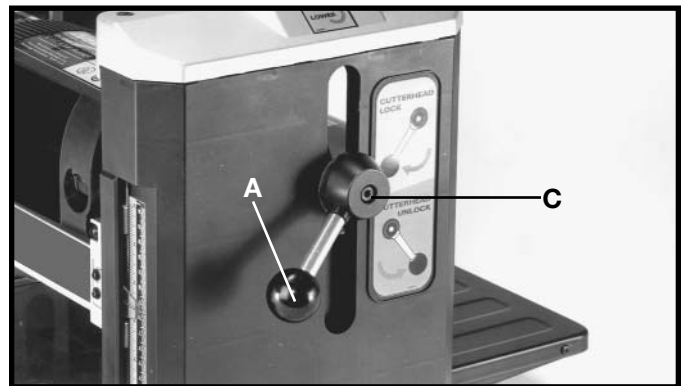


Fig. 6

CUTTERHEAD RAISING AND LOWERING HANDLE

1. Assemble the cutterhead raising and lowering handle (A) Fig. 7, to shaft (B), making certain flat on shaft is engaged with flat in handle.

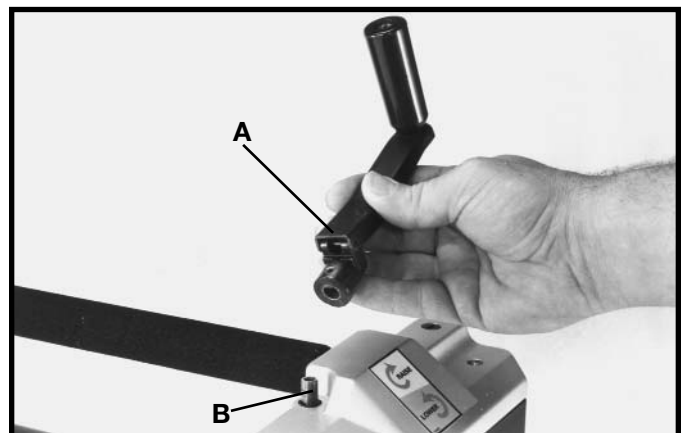


Fig. 7

2. Fasten cutterhead raising and lowering handle (A) Fig. 8, to shaft using the M5x.8x20mm hex socket head screw (C) with wrench supplied.

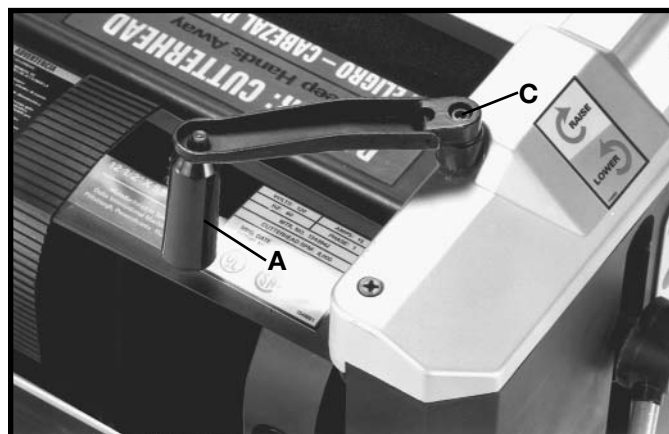


Fig. 8

3. Rotate handle (A) to the operating position as shown in Fig. 9, and tighten set screw (D).

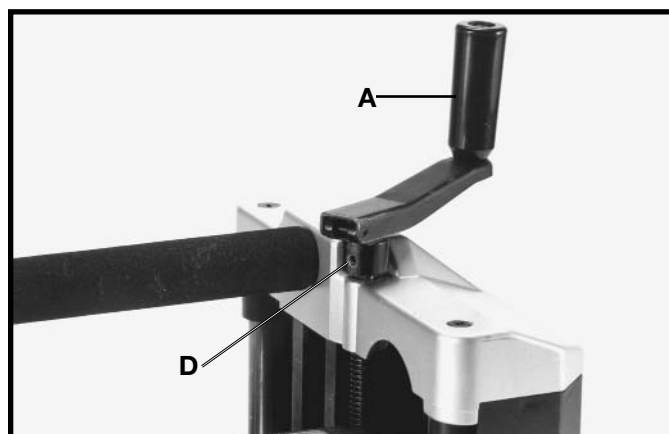


Fig. 9

FASTENING PLANER TO STAND

Place the planer on the stand and align the four holes in the base of the machine, two of which are shown at (A) Fig. 10, with the four holes in the top of the stand. Place the M8x1.25x35mm hex head flange bolt through the holes in the planer and the stand, and thread the M8x1.25 flange nut onto the hex head flange bolt and tighten securely. Only operate planer, attached to stand, on a flat level surface.

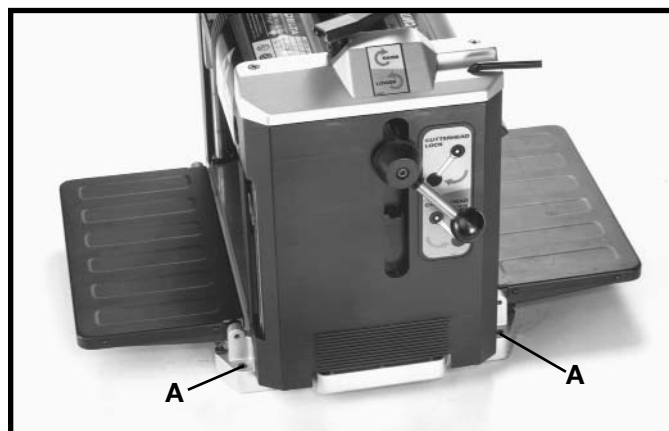


Fig. 10

OPERATING CONTROLS AND ADJUSTMENTS

STARTING AND STOPPING PLANER

The on/off switch (A) Fig. 14, is located on the front of the planer motor. To turn the machine **“ON”** move the switch up to the **“ON”** position. To turn the machine **“OFF”** move the switch down to the **“OFF”** position.

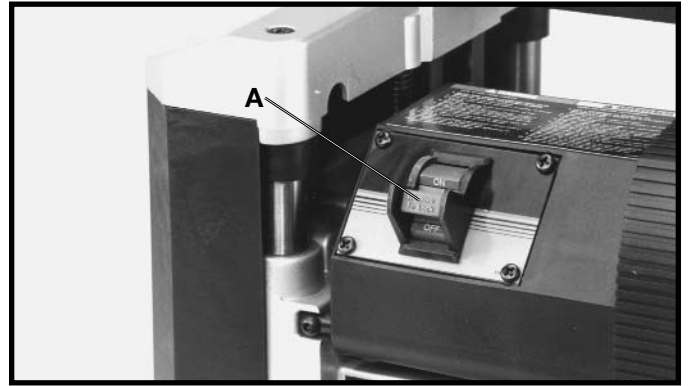


Fig. 14

LOCKING SWITCH IN THE “OFF” POSITION

When the tool is not in use, the switch should be locked in the **“OFF”** position to prevent unauthorized use. This can be done by grasping the switch toggle (B) Fig. 15, and pulling it out of the switch, as shown. With the switch toggle removed, the switch will not operate. However, should the switch toggle be removed while the machine is running, the switch can be turned **“OFF”** once, but cannot be restarted without inserting the switch toggle.

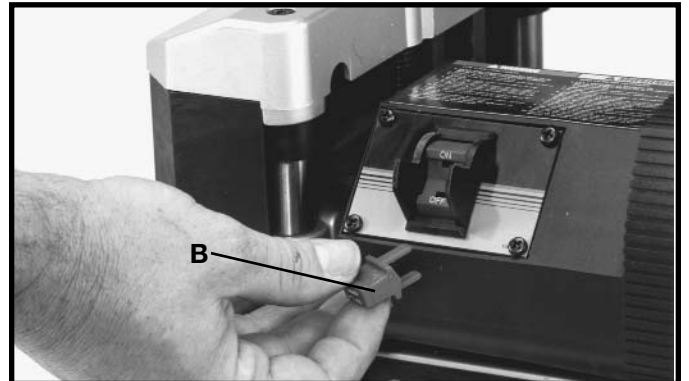


Fig. 15

RAISING AND LOWERING HEAD ASSEMBLY

The head assembly (A) Fig. 16, contains the cutterhead, feed rollers, chip deflector and motor. Raising and lowering the head assembly controls the depth of cut. To raise or lower the head assembly, rotate the cutterhead lock handle (B) counterclockwise to unlock the cutterhead and turn the cutterhead raising and lowering handle (C) clockwise to raise or counterclockwise to lower the cutterhead. One revolution of handle will move the cutterhead up or down $\frac{3}{32}$ ". **ALWAYS LOCK THE CUTTERHEAD IN PLACE, BY ROTATING HANDLE (B) CLOCKWISE BEFORE PLANING.**

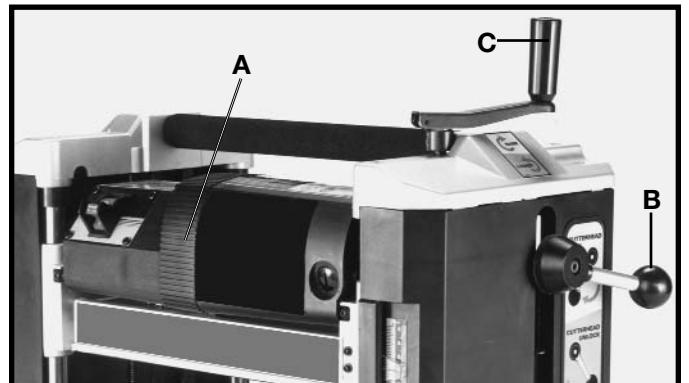


Fig. 16

SCALE AND POINTER

A dual English/Metric scale (D) Fig. 17, and pointer (E) is conveniently located on the front of the machine and indicates the thickness of the finished workpiece. Adjustment to the pointer can be made by running a piece of wood through the machine. Measure the thickness of the workpiece and if an adjustment is necessary, loosen two screws (F) and adjust pointer accordingly. Then tighten two screws.

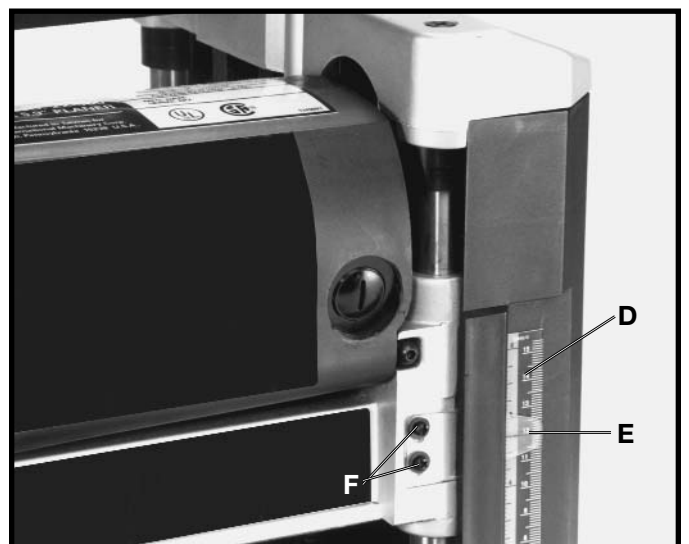


Fig. 17

RECOMMENDED DEPTH OF CUT

NOTE: One revolution of the raising and lowering handle will move the cutterhead up or down $3/32$ of an inch.

A $3/32$ " depth of cut can be made in soft woods on stock up to 8" wide and in hard woods on stock up to 7" wide; see chart in Fig. 18.

For 10" and 12" wide soft wood, we recommend a maximum depth of cut of $1/16$ ". For 10" and 12" wide hard wood, a maximum depth of cut of $3/64$ " is recommended; see chart in Fig. 18.

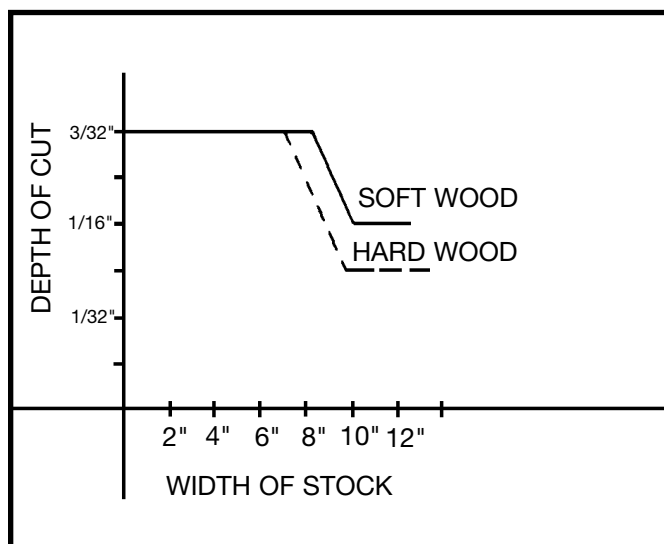


Fig. 18

LEVELING TABLE EXTENSIONS

The table extensions, one of which is shown at (A) Fig. 19, must be level with the planer table. To check and adjust if necessary, proceed as follows:

1. **DISCONNECT MACHINE FROM POWER SOURCE.**

2. Place a straight edge (B) Fig. 19, on the planer table with one end of the straight edge extending out over the infeed table extension (A) as shown. Check to see if the table extension is level with the planer table on both ends of table extension.

3. If an adjustment is necessary, loosen locknut (D) and adjust stop screw (E) on each end of the table (A) until table extension is level with planer table. Then tighten locknut. Recheck and make certain inside edge of table extension is level with planer table. **NOTE: If necessary, loosen two screws (C), adjust table extension and tighten two screws.**

4. Adjust opposite end of table extension (A) in the same manner. Make sure table is solidly supported in the level position.

5. Check and adjust outfeed table extension in the same manner.

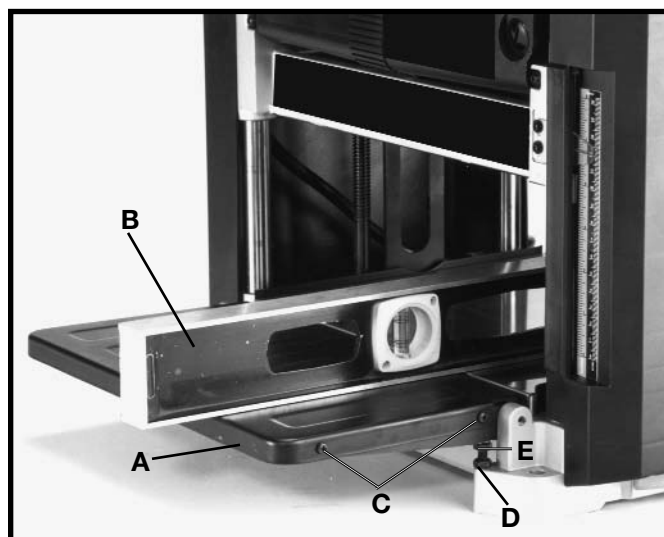


Fig. 19

KNIFE TRANSFER TOOL STORAGE

1. The knife transfer tool (A) Fig. 20, supplied with your planer, can easily be stored underneath the outfeed table extension (B) when not being used. A Velcro strip (C) is provided on the tool and underneath the table for this purpose.

2. Figure 21 illustrates the knife transfer tool (A) stored underneath the outfeed table extension.

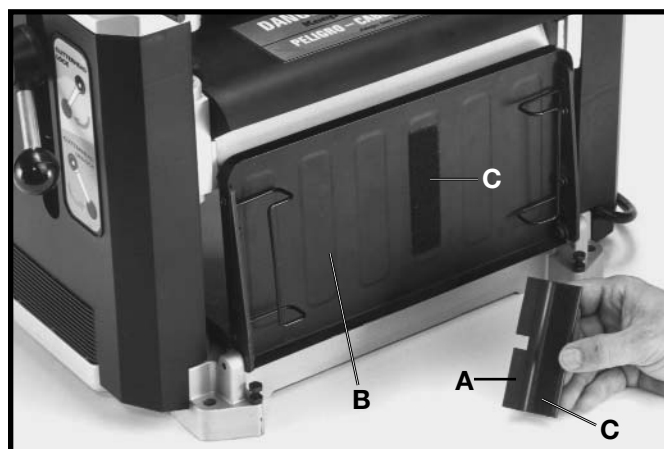


Fig. 20

CORD STORAGE

1. Wire hangers (D) Fig. 21, are provided underneath the outfeed table extension to store the planer power cord when the machine is not in use.
2. Figure 22 illustrates the planer power cord (E) wrapped around the wire hangers.

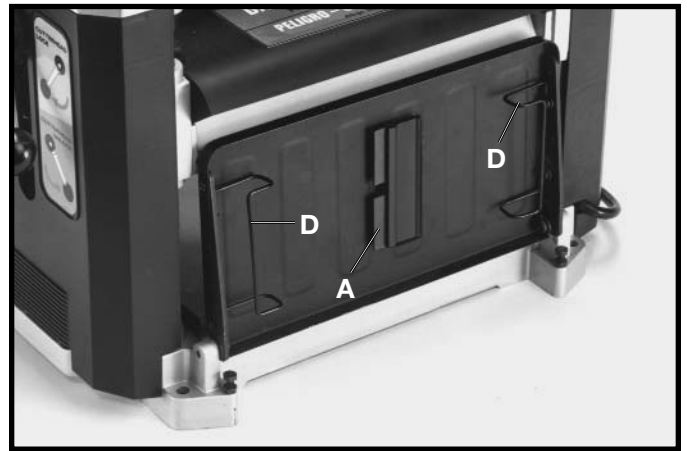


Fig. 21



Fig. 22

WRENCH STORAGE

The wrench (A) Fig. 23, can be stored in hole (B) located on the right rear side of the machine as shown.

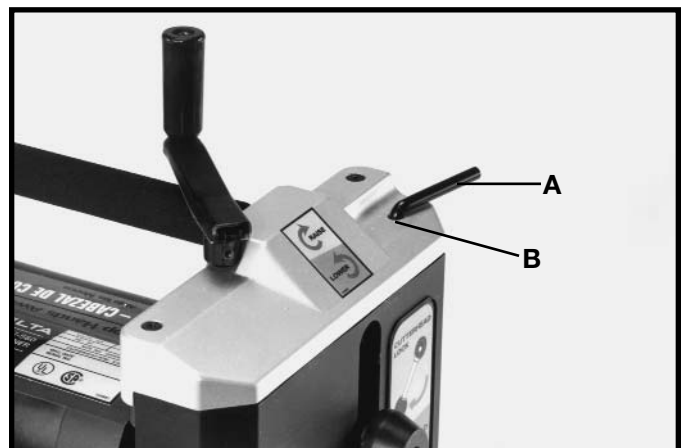


Fig. 23

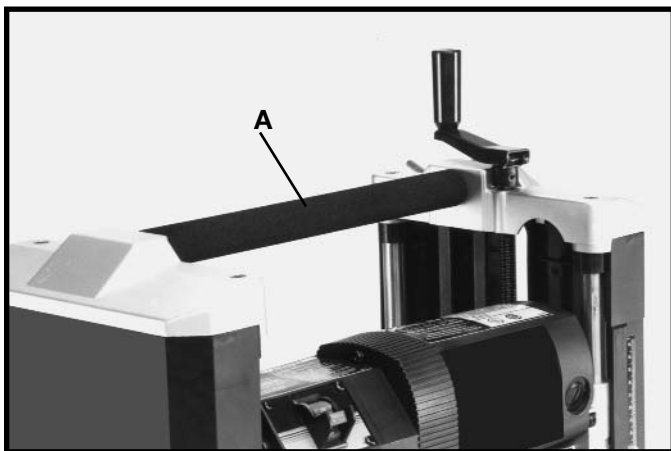


Fig. 25

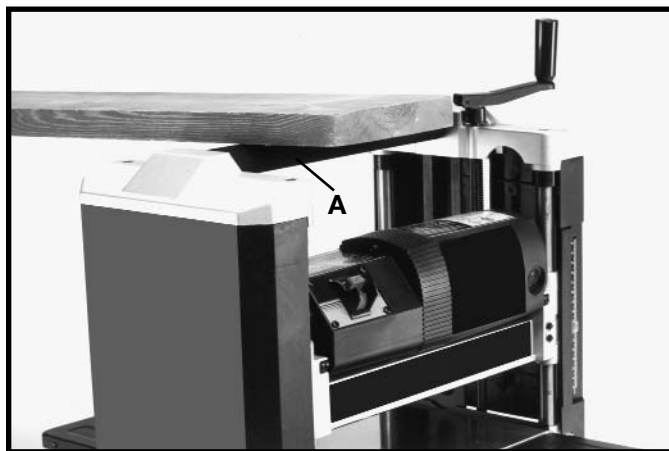


Fig. 26

CARRYING HANDLE/STOCK TRANSFER BAR

1. Your planer is provided with a foam covered carrying handle (A) Fig. 25, located on top of the machine, for ease in transporting the planer. **Carrying handles are also provided at the base of the planer on each side which allow you to lift the machine with ease.**
2. The carrying handle (A) Fig. 26, also doubles as a stock transfer bar for transferring stock from the outfeed to infeed end of the machine. This is helpful when planing long material, as the workpiece can easily be transferred back to the infeed end of the machine for additional cuts.

REPLACING KNIVES

The knives supplied with your planer are double edged and reversible, which enables you to turn the knives end-for-end when one edge becomes dull or chipped. To change the knives, proceed as follows:

1. **DISCONNECT MACHINE FROM POWER SOURCE.**
2. Raise head assembly all the way to the top.
3. Remove two screws (A) Fig. 27, and remove cutterhead guard (B) by pulling it straight out.

 **WARNING: THE KNIVES ARE SHARP.**

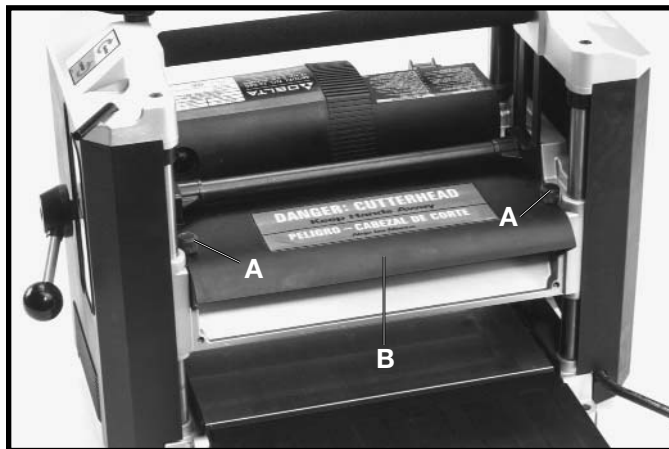


Fig. 27

4. Figure 29 illustrates the cutterhead guard removed, exposing the cutterhead (C).
5. Using the wrench supplied, rotate cutterhead by inserting end of wrench into the hex hole (A) Fig. 28. Rotate cutterhead until the cutterhead lock (D) Fig. 29, engages and locks the cutterhead (C) in place.

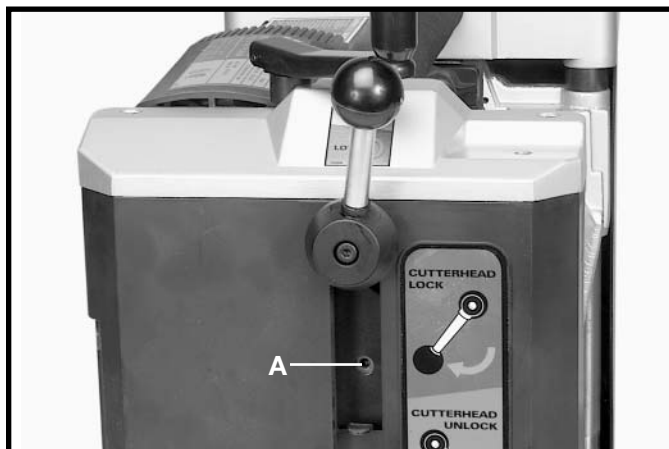


Fig. 28

6. Figure 29 illustrates the cutterhead (C) locked in place allowing access to the knife locking bar (E).

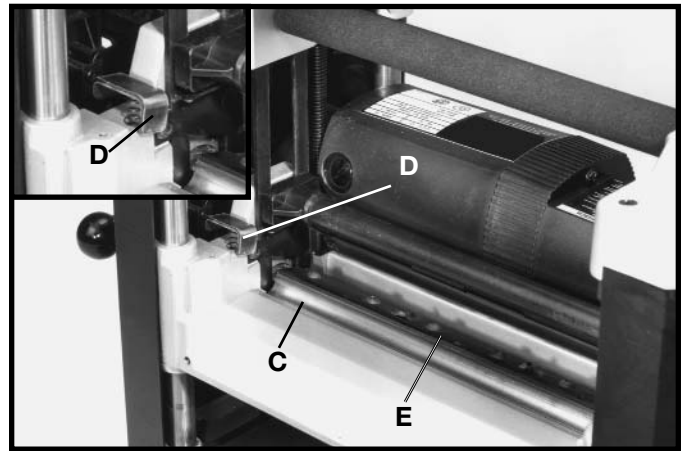


Fig. 29

7. Using the supplied wrench (E) Fig. 30, unscrew the six screws, five of which are shown at (F), only enough until locking bar (D) separates from knife, allowing knife to be removed.

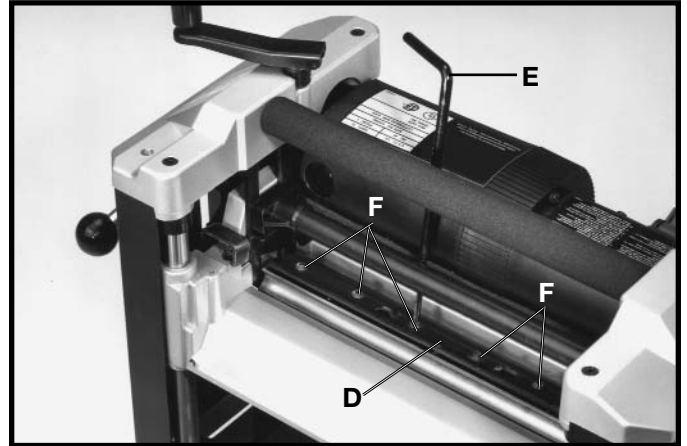


Fig. 30

8. Insert knife transfer tool (G) Fig. 31, underneath center of knife. Lift the knife transfer tool up until knife (H) separates from pins (J) and pull out and remove knife as shown. **NOTE:** Knife transfer tool is magnetized, allowing it to attach to knife.

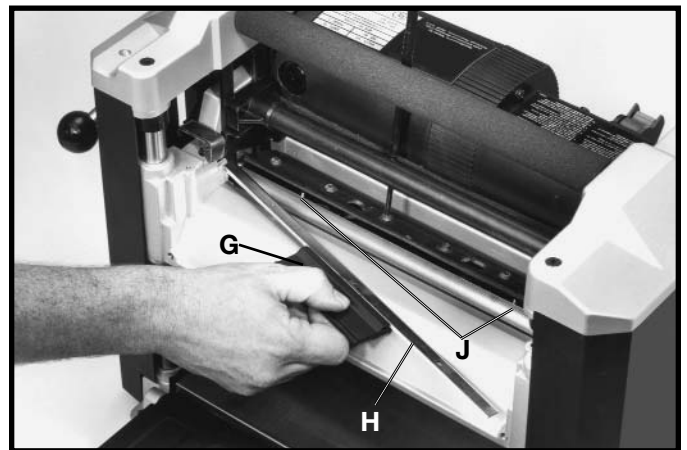


Fig. 31

9. Rotate knife (H) Fig. 32, end-for-end, or using a new knife, position knife transfer tool (G) on top of knife as shown. Place knife in cutterhead with bevel up underneath locking bar (D), making sure pins (J) in cutterhead engage with holes (K) in knife.

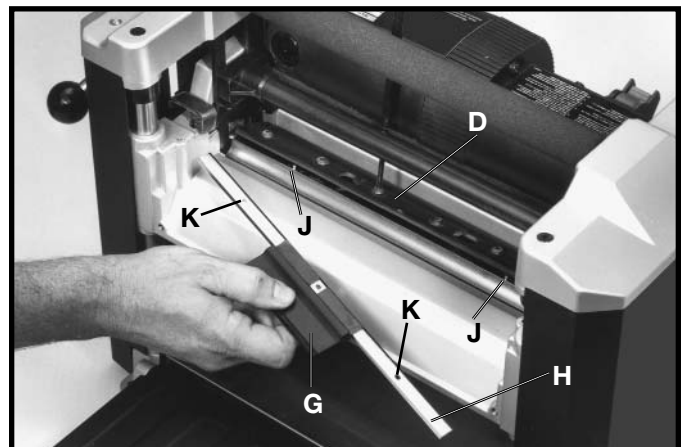


Fig. 32

10. Remove knife transfer tool and tighten the six screws, five of which are shown at (F) Fig. 33, using wrench (E) supplied.

11. Replace other knife by rotating head 180 degrees and repeat **STEPS 5 THROUGH 10**.

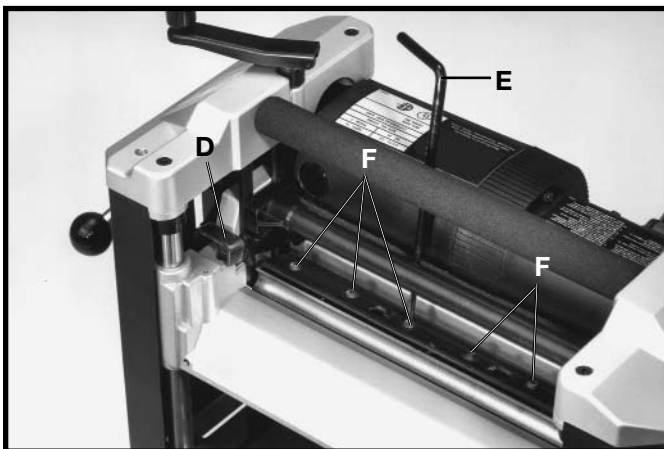


Fig. 33

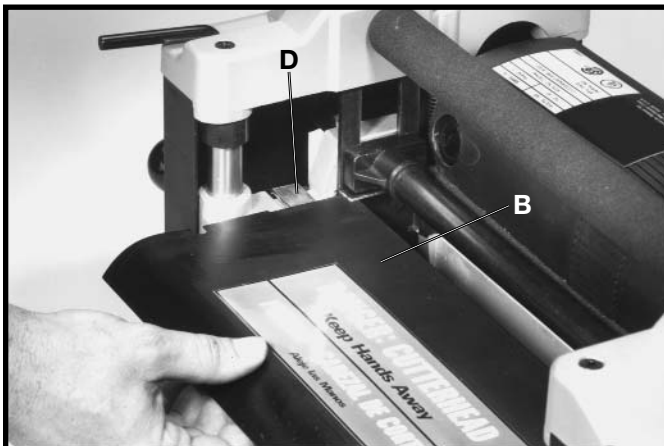


Fig. 34

12. Replace cutterhead guard (B) Fig. 34, making sure cutterhead lock (D) is depressed and underneath guard as shown. Slide guard in as far as possible and replace two screws, one of which is shown at (A) Fig. 35. These screws were removed in **STEP 3**.



Fig. 35

ADJUSTING HEIGHT OF OUTFEED ROLLER

1. **DISCONNECT MACHINE FROM POWER SOURCE.**

2. The outfeed roller is adjusted at the factory to be 0.020" below the cutting circle. In order to check and adjust the outfeed roller, you will need a homemade gage block made of hardwood. This gage block can be constructed by following the dimensions shown in Fig. 36. **NOTE: Make sure that the height of the block is exactly 4".**

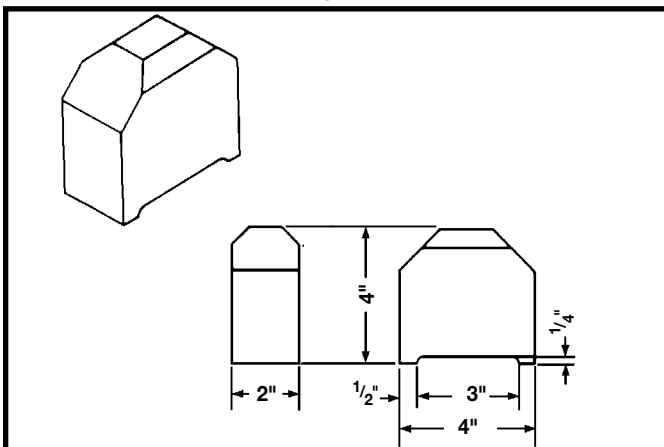


Fig. 36

3. Make sure the knives are inserted into the cutterhead properly, as explained under **“REPLACING KNIVES.”**

4. Place the gage block (A) Fig. 37, on the table, over a 0.020" feeler gage and position the gage block (A) directly underneath the cutterhead. Raise or lower the head assembly and rotate the cutterhead, by following **STEP 5** under **“REPLACING KNIVES,”** until one of the knives (B) just touches the top of the gage block when the knife is at its lowest point. Then tighten cutterhead lock handle.

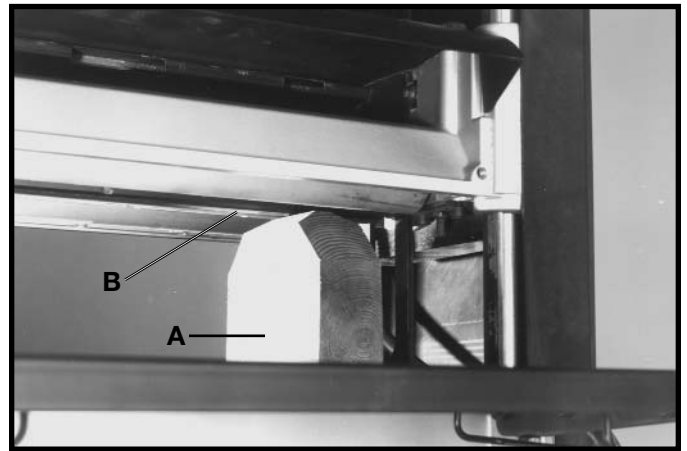


Fig. 37

5. Move the gage block (A) Fig. 38, **minus the feeler gage**, under one end of the outfeed roller (C) as shown. The bottom of the outfeed roller should just touch the top of the gage block.

6. If the height of the outfeed roller must be adjusted, loosen locknut (D) Fig. 38, and turn adjusting screw (E) until outfeed roller just touches the gage block (A). Tighten locknut after adjustment is made.

7. Repeat this adjustment on opposite end of outfeed roller (C) Fig. 38.

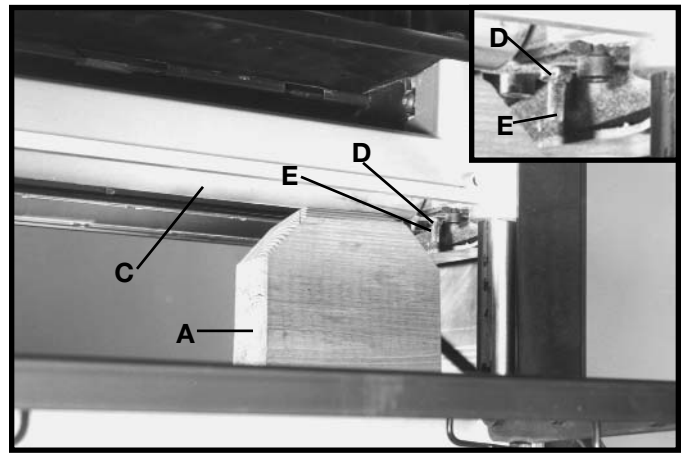


Fig. 38

OPERATING HINTS

When using your machine, you may want to follow these few simple steps for achieving the best results possible.

1. **True Up One Face** – Feed one face of the board over a jointer, making thin cuts with each pass, until the entire surface is flat.
2. **Plane to Thickness** – Place the side you just surfaced in **STEP 1** face down and feed the board through the planer, plane until this side is flat. Then plane both sides of the board until you are satisfied with the thickness, making thin cuts, alternating sides with each pass. If during the planing operation you notice the board twisting, warping or bowing, repeat **STEP 1** and true up one face.
3. When planing long stock, provide table extensions to support the infeed and outfeed end of the workpiece.
4. For best results, always engage cutterhead lock before planing, plane with the grain only, and keep planer table clean. Occasionally, wax table surface to reduce friction during the planing operation.
5. **Cross-cut to Final Length** – Cross-cut lumber to final length, to remove any snipe which may have occurred during the planing operation.

NOTE: THE KNIVES ON THE PLANER WILL NOT WEAR EVENLY IF THE WOOD IS FED THROUGH THE SAME SPOT ON THE TABLE EVERY TIME. FEED THE WOOD THROUGH THE PLANER AT DIFFERENT SPOTS ON THE TABLE WHEN POSSIBLE, TO HELP ELIMINATE UNEVEN WEAR OF THE KNIVES.

MAINTENANCE

BRUSH INSPECTION AND REPLACEMENT

DISCONNECT MACHINE FROM POWER SOURCE.

Brush life varies. It depends on the load on the motor. Check the brushes after the first 50 hours of use for a new machine or after a new set of brushes has been installed. After the first check, examine them after about every 10 hours of use until replacement is necessary.

The brush holders, one of which is shown at (A) Fig. 39, are located on the motor housing opposite each other. Fig. 40, illustrates one of the brushes removed for inspection. When the carbon (B) on either brush is worn to 3/16" in length or if either spring (C) or shunt wire is burned or damaged in any way, replace both brushes. If the brushes are found serviceable after removing, re-install them in the same position as removed.



Fig. 39

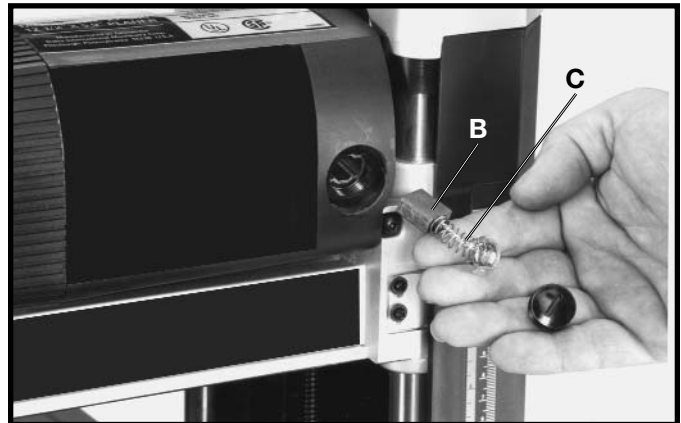


Fig. 40

LUBRICATION

The gears in the gear box and the feed roller bushings should be lubricated periodically, as follows:

1. **DISCONNECT MACHINE FROM POWER SOURCE.**
2. Remove two screws (A) Fig. 41, located on bottom of left side cover (B) of planer, and remove left side cover.
3. Place extreme pressure lithium grease on the teeth of gears (C) Fig. 42, and replace the side cover.
4. Lay the planer on its back and squirt oil on the feed roller bushings (D) Fig. 43, at each end of the feed rollers.

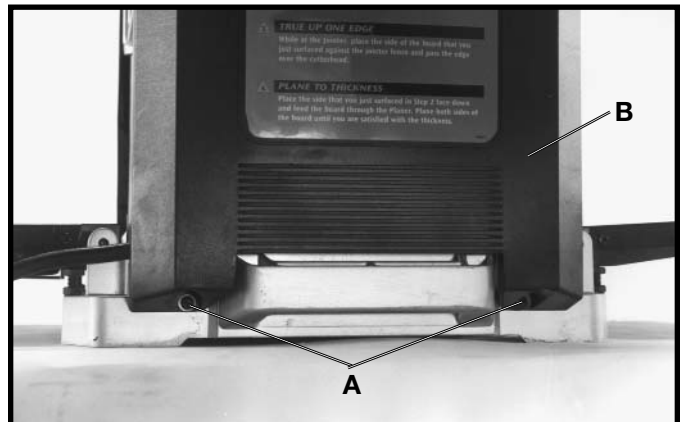


Fig. 41

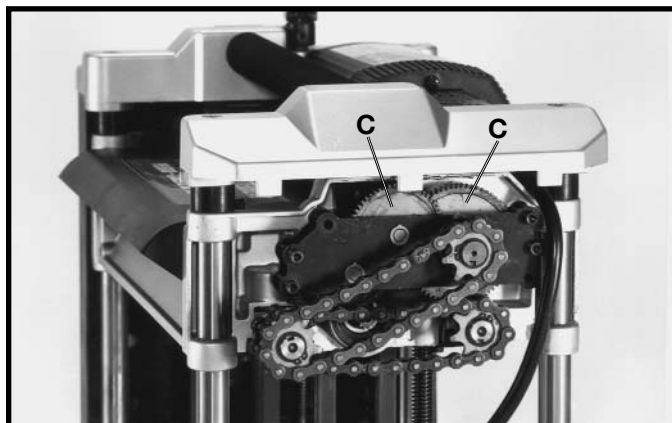


Fig. 42

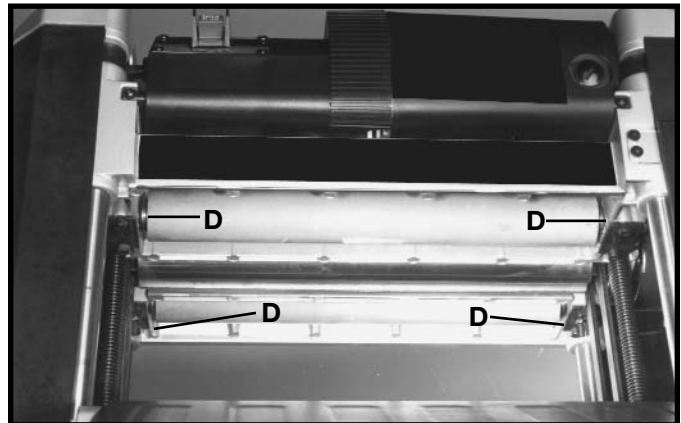


Fig. 43

NOTES

ACCESSORIES

A complete line of accessories is available from your Delta Supplier, Porter-Cable • Delta Factory Service Centers, and Delta Authorized Service Stations. Please visit our Web Site www.deltamachinery.com for a catalog or for the name of your nearest supplier.



WARNING: Since accessories, other than those offered by Delta, have not been tested with this product, use of such accessories could be hazardous. For safest operation, only Delta recommended accessories should be used with this product.



PARTS, SERVICE OR WARRANTY ASSISTANCE

All Delta Machines and accessories are manufactured to high quality standards and are serviced by a network of Porter-Cable • Delta Factory Service Centers and Delta Authorized Service Stations. To obtain additional information regarding your Delta quality product or to obtain parts, service, warranty assistance, or the location of the nearest service outlet, please call 1-800-223-7278 (In Canada call 1-800-463-3582).



Two Year Limited Warranty

Delta will repair or replace, at its expense and at its option, any Delta machine, machine part, or machine accessory which in normal use has proven to be defective in workmanship or material, provided that the customer returns the product prepaid to a Delta factory service center or authorized service station with proof of purchase of the product within two years and provides Delta with reasonable opportunity to verify the alleged defect by inspection. Delta may require that electric motors be returned prepaid to a motor manufacturer's authorized station for inspection and repair or replacement. Delta will not be responsible for any asserted defect which has resulted from normal wear, misuse, abuse or repair or alteration made or specifically authorized by anyone other than an authorized Delta service facility or representative. Under no circumstances will Delta be liable for incidental or consequential damages resulting from defective products. This warranty is Delta's sole warranty and sets forth the customer's exclusive remedy, with respect to defective products; all other warranties, express or implied, whether of merchantability, fitness for purpose, or otherwise, are expressly disclaimed by Delta.

Printed in U.S.A.